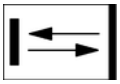
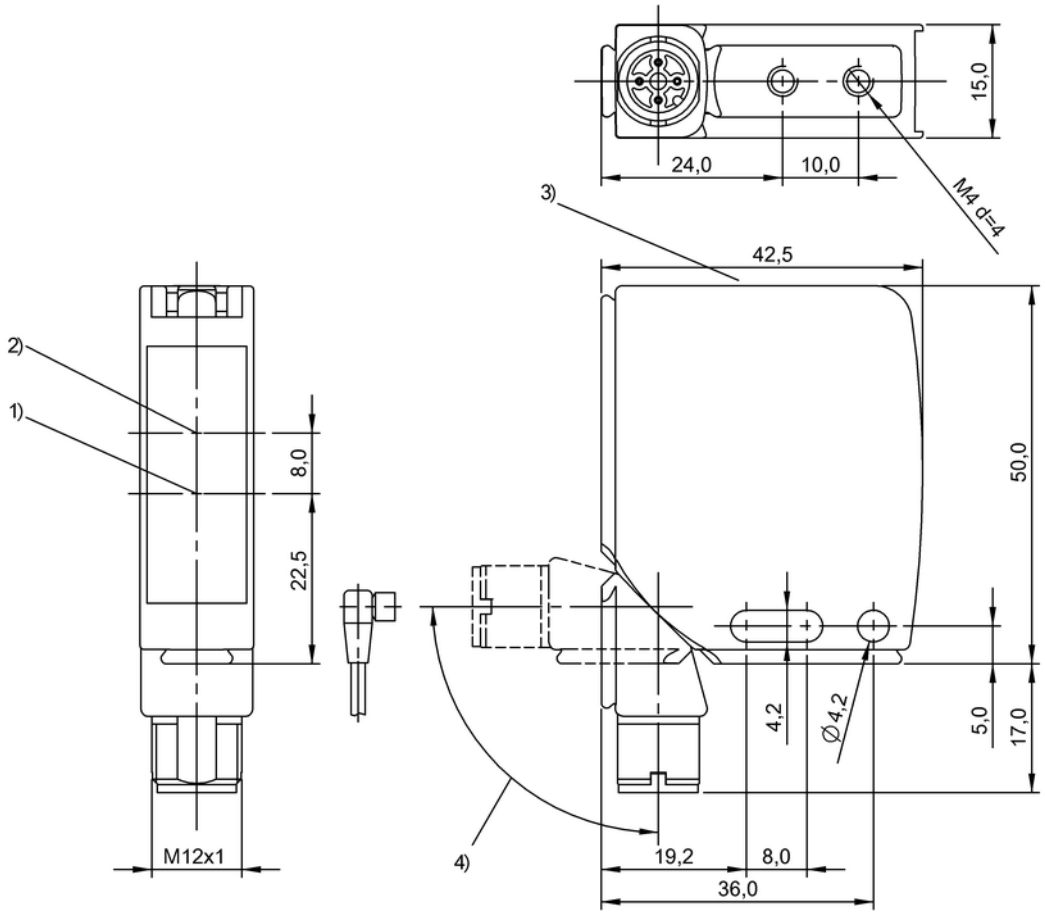
BOS 21M-PA-ID10-S4
Ordering code: BOS0031

Diffuse sensor
Series 21M
Working Range: 50...2000 mm

PNP (2x), NO-NC (pins 4-2)
Infrared
DC, direct current





1) Optical axis emitter, 2) Optical axis receiver, 3) Display and control panel, 4) 270° rotatable

Characteristic data

Operating voltage	10...30 V DC
Connection	Connector, M12x1-S04
Switching freq. f max.	500 Hz
Indicator	Stability - LED GN
Setting	Switching distance (Sn)
Adjuster	Potentiometer 270° (1x)
Short-circuit protected	yes
Protected against polarity reversal	yes
Enclosure Type per IEC 60529	IP67
Protection class	II

Optical data

Principle of optical operation	Light scanner, energetic
Switching function, optical	NO light-on - NC dark-on
Light type	Infrared
Wavelength	880 nm
Ambient light max.	10,000 Lux

Electrical data

Rated operating voltage Ue DC	24 V
Effective operating current Ie	100 mA
Rated insulation voltage Ui	75 V DC
Load capacitance max. (at Ue)	1 µF
Ripple max. (% of Ue)	8
Switching output	PNP (2x)
Switching function	NO-NC (pins 4-2)
Turn-off delay toff max.	1 ms
Turn-on delay ton max.	1 ms
No-load current max. Io at Ue	35 mA
Voltage drop Ud max. (at Ie)	2 V

Mechanical data

Eff. switching distance Sr	2000 mm
Capture range Sd	50...2000 mm
Beam characteristic	Divergent
Range Sn	Sn = 2 m, adjustable
Minimum operating distance	50 mm
Connector type	M12x1-S04
Sensing surface material	PMMA
Housing material	GD-Zn, aluminum
Oberflächenschutz	Powder coated
Mounting type	Screw M4
Design	Block, rotatable connection
Ambient temperature	-25...55 °C

Internet : www.balluff.com
Balluff Germany : +49 (0) 7158 173-0, 173-370
Balluff USA : 1-800-543-8390
Balluff China : +86 (0) 21-50 644131

BOS 21M-PA-ID10-S4
Ordering code: BOS0031

BALLUFF
sensors worldwide

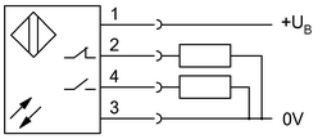
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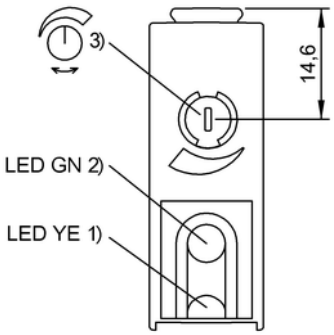
Basic data
Basic standard IEC 60947-5-2

The sensor is functional again after the overload has been eliminated.
Reference object (target): Gray card, 200 x 200, 90 % remission, axial approach.
Only for NFPA 79 applications (machines with a supply voltage of maximum 600 volts). Device shall be connected only by using any R/C (CYJV2) cord, having suitable ratings.
For additional information, refer to user's guide.
Order accessories separately.

LISTED IND. CONT. EQ. 81U2 for use in the secondary of a class 2 source of supply







1) Output function
2) Stability
3) Sensitivity